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| APPLICATION NO.   | FILING DATE                             | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |  |
|---|---|----------------------|-------------------------|-----------------|--|
| 10/734,363  | 12/12/2003                              | Jerrel C. Anderson   | AD7079 USNA             | 2812            |  |
| 23906   | 7590 09/22/2005                         |                      | EXAMINER                |                 |  |
| E I DU PONT DE NEMOURS AND COMPANY<br>LEGAL PATENT RECORDS CENTER |   |                      | CHEN, VIVIAN            |                 |  |
| BARLEY MI   | LL PLAZA 25/1128                        | ART UNIT             | PAPER NUMBER            |                 |  |
| 4417 LANCA<br>WILMINGTO   | ASTER PIKE<br>DN, DE 19805              |                      | 1773                    |                 |  |
|   | , = = = = = = = = = = = = = = = = = = = |                      | DATE MAILED: 09/22/2005 | ;               |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  | Application No.   |   | Applicant(s)   |                 |  |  |
|---|--|---|---|--|-----------------|--|--|
|   |  | 10/734,363  |   | ANDERSON, JERREL C.  |                 |  |  |
| Office Action Summary   |  | Examiner  |   | Art Unit   |                 |  |  |
|   |  | Vivian Che  | n   | 1773   |                 |  |  |
| The MAILING Period for Reply  | DATE of this communication a   | appears on the  | cover sheet with  | the correspondence a   | ddress          |  |  |
| WHICHEVER IS LO  - Extensions of time may be after SIX (6) MONTHS fro  - If NO period for reply is sp.  - Failure to reply within the Any reply received by the | ATUTORY PERIOD FOR REF<br>NGER, FROM THE MAILING<br>e available under the provisions of 37 CFR<br>in the mailing date of this communication.<br>hecified above, the maximum statutory perions<br>set or extended period for reply will, by state<br>Office later than three months after the material ment. See 37 CFR 1.704(b). | DATE OF TH<br>1.136(a). In no ever<br>od will apply and will<br>tute, cause the appli | S COMMUNICATE  tt, however, may a rep  expire SIX (6) MONTE  cation to become ABA | ATION. Ity be timely filed  HS from the mailing date of this NDONED (35 U.S.C. § 133). |                 |  |  |
| Status  |  |   |   |  |                 |  |  |
| 1)☐ Responsive to   | communication(s) filed on  | ·   |   |  |                 |  |  |
| 2a) ☐ This action is  |  | ——<br>his action is no  | n-final.  |  |                 |  |  |
| 3)☐ Since this app  |  |   |   |  |                 |  |  |
| closed in acco  | rdance with the practice unde  | er Ex parte Qua   | yle, 1935 C.D.  | 11, 453 O.G. 213.  |                 |  |  |
| Disposition of Claims   |  |   |   |  |                 |  |  |
| 4)⊠ Claim(s) 1-29   | is/are pending in the application  | on.   |   |  |                 |  |  |
|   | ve claim(s) is/are withd   |   | sideration.   |  |                 |  |  |
| 5)⊠ Claim(s) <u>26</u> is   | /are allowed.  |   |   |  |                 |  |  |
| 6)⊠ Claim(s) <u>1-25</u>  | and 27-29 is/are rejected.   |   |   |  |                 |  |  |
| 7) Claim(s)   | _ is/are objected to.  |   |   |  |                 |  |  |
| 8) Claim(s)   | _ are subject to restriction and   | d/or election re  | quirement.  |  |                 |  |  |
| Application Papers  |  |   |   |  |                 |  |  |
| 9) The specificati  | on is objected to by the Exami   | iner.   |   |  |                 |  |  |
| 10) The drawing (s)   | ) filed on is/are: a)□ a   | ccepted or b)[  | objected to by  | y the Examiner.  |                 |  |  |
| Applicant may r   | not request that any objection to the  | he drawing(s) be  | held in abeyanc   | e. See 37 CFR 1.85(a).   |                 |  |  |
| Replacement di  | rawing sheet(s) including the corr   | ection is require   | d if the drawing(s  | ) is objected to. See 37 (   | CFR 1.121(d).   |  |  |
| 11)☐ The oath or de   | claration is objected to by the  | Examiner. No  | e the attached  | Office Action or form P  | TO-152.         |  |  |
| Priority under 35 U.S.C   | C. § 119   | ,   |   |  |                 |  |  |
| ·   | ent is made of a claim for forei   | ign priority und  | er 35 U.S.C. §  | 119(a)-(d) or (f).   |                 |  |  |
|   | ome * c) None of:  |   |   |  |                 |  |  |
|   | copies of the priority docume  |   |   |  |                 |  |  |
|   | d copies of the priority docume  |   | •   |  |                 |  |  |
| •   | of the certified copies of the p   | -   |   | eceived in this Nationa  | ll Stage        |  |  |
|   | ion from the International Bure  | •   |   |  |                 |  |  |
| " See the attache   | d detailed Office action for a li  | ist of the certifi  | ed copies not re  | eceived.   |                 |  |  |
|   |  |   |   |  |                 |  |  |
| Attachment(s)   |  |   |   |  |                 |  |  |
| 1) Notice of References C   |  |   |   | mmary (PTO-413)  |                 |  |  |
|   | Patent Drawing Review (PTO-948)  |   |   | Mail Date  | TO 152)         |  |  |
| 3) [X] Information Disclosure : Paper No(s)/Mail Date (   | Statement(s) (PTO-1449 or PTO/SB/0<br><u>3-2004</u> .  | ,   | 6) Other:   | ormal Patent Application (PT<br>   | U-152)          |  |  |
| J.S. Patent and Trademark Office  |  |   |   |  |                 |  |  |
| PTOL-326 (Rev. 7-05)  | Office   | Action Summar   | <i>'</i>  | Part of Paper No./Mail I   | Date 20050915 V |  |  |

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12, 14-25, 27 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, 14, 27, the phrase "polyolefins, including polyethylenes and polypropylenes" are vague and indefinite (or in the alternative, redundant) because it is unclear the term "polyolefins" are limited to only "polyethylenes and polypropylenes".

Claims 2-12 are vague and indefinite because there is insufficient antecedent basis for the phrase "the other polymer(s)".

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 5-7, 11, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

ROBINSON (US 5,690,994) or ROBINSON (US 5,698,329) or ROBINSON (US 5,411,845) or ROBINSON (US 5,770,312).

The ROBINSON references disclose a polyester film (e.g., PET) coated with an adhesion-promoting coating comprising a polyallylamine, wherein the coating is applied to the polyester film in-line, heated to typical temperatures of 150-240 C, and further stretched prior to bonding with other polymer layers (e.g., polyvinyl butyral, polyethylene, etc.) to form a multilayer film suitable for graphic or imaging applications.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply two different polymer materials to the primed surface of a polyester film (claim 5) in order to obtain specific physical properties in specific regions of the film (e.g., sealability in one portion and enhanced abrasion resistance in others, etc.). One of ordinary skill in the art would have laminated the primed polyester film to another polyester film (claim 6) in order to obtain a laminate with improved mechanical or barrier properties. It would have been obvious to use the multilayer film of the ROBINSON references as components in conventional display articles (claim 29).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over ROBINSON (US 5,690,994) or ROBINSON (US 5,698,329) or ROBINSON (US 5,411,845) or ROBINSON (US 5,770,312) as applied to claim 1, 2, 5-6 above, and further in view of ANDERSON (US 5,069,942).

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ANDERSON discloses that it is well known in the art to apply polysiloxane hardcoats to polyester films in order to improve abrasion resistance. (line 15-20, col. 1)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply a known functional layer such as a polysiloxane-based coating on the films of the ROBINSON references in order to improve durability.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over: MOLNAR ET AL (US 6,686,012).

MOLNAR ET AL discloses a laminate structure comprising a polyester first layer, fluoropolymer second layer, and a third polymer layer, wherein a bonding layer comprising a polyallylamine is present between the first and the second layer, and between the second layer and the third layer.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a known bonding layer to increase interlayer adhesion between components.

#### Allowable Subject Matter

- 7. Claims 4, 8-9, 12, 14-25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 8. Claim 26 is allowable over the prior art of record.

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9. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to disclose or suggest a polyallylamine-primed polyester film directly bonded via the primer layer to an ionomer layer.

#### Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 19, 2005

Vivian Chen
Primary Examiner
Art Unit 1773